

**Teresa Lloro-Bidart** is the evaluator of UC Riverside's "Down to Earth Climate Science Project." The program involves the teaching of an undergraduate Climate Change course for non-majors, a science fair mentoring program for K-12 students, and a one-day community Climate Fair held at our campus. This program's evaluation design is mixed-methods, with a more prominent emphasis on qualitative evaluation. Especially valued is the incorporation of evaluation tools that assist us in meeting the needs of the diverse population and diverse surrounding community our university serves.

To that that end, in this session interview protocols will be shared out that were developed for use with science fair mentors and K-12 students. Because not all programs have a science fair component, general techniques for developing interview protocols designed to get the perspectives of those being interviewed (and not that of the evaluator) will be discussed. These techniques can applied to any aspect of a program.

Strategies for evaluating large events (such as the UCR Climate Fair), the advantages of including participant-observation in the evaluation, and the importance of translating evaluation materials into the languages of the populations served by the grant, will also be considered.

**Gillian Roehrig** is the PI of the University of Minnesota NICE project - CYCLES: Teachers discovering climate change from native perspective. CYCLES is a partnership between science educators, scientists and Ojibwe communities in northern Minnesota. Twenty middle and high school teachers from five reservations in Northern Minnesota are participating in a three-year teacher professional development program to develop and implement culturally-relevant approaches to teaching climate change science with their American Indian students. Our research is guided by the following questions:

1. How does CYCLES professional development affect...
  - ...teachers' **attitudes and beliefs** about climate change?
  - ...teachers' **conceptual knowledge** of climate change?
  - ...teachers' perceptions and practice of **culturally relevant science teaching**?
2. How do the above factors influence teachers' teaching practices and student outcomes related to climate change?

In this session, protocols for investigating teachers' attitudes, climate change knowledge and culturally relevant science teaching practices will be shared. In particular, the focus will be on strategies for exploring teachers' conceptual knowledge of climate change using concept mapping and photo-elicitation interviews. Participants will have an opportunity to explore the research protocols and discuss how these approaches could be adapted for use in other CCE programs.